

SUCCESSFUL PEDAGOGICAL PRACTICES IN MATHEMATICS: CONTRIBUTIONS OF PEDAGOGICAL PLANNING

PRÁTICAS PEDAGÓGICAS EXITOSAS EM MATEMÁTICA: CONTRIBUIÇÕES DO PLANEJAMENTO PEDAGÓGICO

PRÁCTICAS PEDAGÓGICAS EXITOSAS EN MATEMÁTICAS: APORTES DE LA PLANIFICACIÓN PEDAGÓGICA



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ABSTRACT

This article stems from a doctoral thesis that is methodologically characterized as qualitative research of the case study type. Its theoretical foundation is based on: successful pedagogical practices, pedagogical planning, and learning assessment within the discipline of Mathematics in secondary education at CETI Augustinho Brandão, in Cocal dos Alves-Piauí. This section addresses the following research question: how does pedagogical planning contribute to the development of successful pedagogical practices in Mathematics in secondary education? It aims to analyze how pedagogical planning contributes to the construction of successful pedagogical practices in Mathematics in secondary education. It uses narrative interviews with teachers and administrators for data collection. For the analytical procedure, it employs the technique of comprehensive-interpretative data analysis (Sousa, 2014). It concludes that the success of pedagogical practices requires, preliminarily, the presence of careful pedagogical planning that guides and supports the implementation of teaching actions, based on information provided by learning assessment, promoting successful mathematics learning for high school students at the aforementioned institution.

Keywords: Educational Planning. Successful Teaching Practices. Mathematics Teaching.

RESUMO

Este artigo decorre de uma tese doutoral que se caracteriza, metodologicamente, como pesquisa qualitativa do tipo estudo de caso. Dispõe como fundamentação teórica: práticas pedagógicas exitosas, planejamento pedagógico e avaliação da aprendizagem no âmbito da disciplina Matemática, no Ensino Médio no CETI Augustinho Brandão, em Cocal dos Alves-Piauí. Neste recorte, registra a seguinte questão-problema: como o planejamento pedagógico contribui para o desenvolvimento de práticas pedagógicas exitosas em Matemática, no ensino médio? Objetiva analisar como o planejamento pedagógico contribui na construção de práticas pedagógicas exitosas em Matemática no ensino médio. Adota a entrevista narrativa, com professores e gestores, para a produção de dados. Para o procedimento analítico, utiliza a técnica de análise compreensiva-interpretativa de dados (Sousa, 2014). Conclui que o êxito das práticas pedagógicas requer, preliminarmente, a

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presença de cuidadoso planejamento pedagógico que direcione e apoie a efetivação das ações docentes, fundamentadas nas informações fornecidas pela avaliação da aprendizagem, promovendo bem-sucedidas aprendizagens de matemática dos estudantes no ensino médio da referida instituição.

Palavras-chave: Planejamento Pedagógico. Práticas Pedagógicas Exitosas. Ensino de Matemática.

RESUMEN

Este artículo se deriva de una tesis doctoral que se caracteriza metodológicamente como una investigación cualitativa de tipo estudio de caso. Su fundamento teórico se basa en: prácticas pedagógicas exitosas, planificación pedagógica y evaluación del aprendizaje en la disciplina de Matemáticas en la educación secundaria en el CETI Augustinho Brandão, en Cocal dos Alves-Piauí. Esta sección aborda la siguiente pregunta de investigación: ¿cómo contribuye la planificación pedagógica al desarrollo de prácticas pedagógicas exitosas en Matemáticas en la educación secundaria? El objetivo es analizar cómo la planificación pedagógica contribuye a la construcción de prácticas pedagógicas exitosas en Matemáticas en la educación secundaria. Utiliza entrevistas narrativas con docentes y administradores para la recopilación de datos. Para el procedimiento analítico, emplea la técnica de análisis de datos comprensivo-interpretativo (Sousa, 2014). Concluye que el éxito de las prácticas pedagógicas requiere, preliminarmente, la presencia de una planificación pedagógica cuidadosa que guíe y apoye la implementación de acciones de enseñanza, basadas en la información proporcionada por la evaluación del aprendizaje, promoviendo el aprendizaje exitoso de las matemáticas para estudiantes de secundaria en la institución mencionada.

Palabras clave: Planificación Educativa. Prácticas Docentes Exitosas. Enseñanza de Matemática.

1 INTRODUCTION

The discipline of Mathematics in High School, in a way, has presented itself as a challenging field for teachers, since it is often observed that students have difficulties in understanding basic mathematical concepts, not adequately deepened in Elementary School, a reality that brings as more visible results, with students, demotivation and low school performance. In this scenario, pedagogical planning assumes centrality, as a guide and strengthener of the teaching work, in the organization and processes of teaching and learning with a view to the construction of effective and meaningful pedagogical practices.

By assuming this centrality, planning reveals the perspective that planning is not just about the elaboration of lesson plans, but implies critically reflecting on the students' reality in order to define learning goals and select methodologies that favor the achievement of these purposes. Thus, we start from the assumption that successful pedagogical practices in Mathematics result from intentional planning, articulated with the needs of students, supported by an inclusive view of the educational process.

Initially, it registers the following question: how does pedagogical planning contribute to the development of successful pedagogical practices in the discipline of Mathematics in High School? We selected as the research space the CETI Augustinho Brandão, in Cocal dos Alves-PI, due to the expressive performance of teachers and students of the aforementioned institution in the mathematical field, as shown by the qualitative parameters recorded in the Basic Education Development Index (IDEB), in the period from 2015 to 2024, according to data made available by the National Institute of Educational Studies and Research Anísio Teixeira (INEP), agency linked to the Ministry of Education and Culture (MEC).

The monitoring of the school flow of High School carried out by the State Department of Education of Piauí (SEDUC-PI), in conjunction with the evolution of the IDEB, in the aforementioned 2015-2024 time frame, highlights relevant aspects in this regard, among which we highlight: a) progressive increase in the performance and promotion rates of students, resulting in a school success rate above 90%, considered the most expressive recorded; b) according to data from the QEdU Portal – Educational Data Portal of Brazil (Lemann Foundation, 2021), the Augustinho Brandão State Full-Time Center (CETI) presented a remarkable performance in the area of Mathematics, reaching, in 2015, an index of 336.26 points (Level 9, the highest); in 2017, an index of 346.37 points (Level 9); and, in 2019, an index of 333.48 points (Level 9).

In a context of this nature, in which we are faced with expressive results regarding student performance, we note that its general objective is to analyze how pedagogical

planning contributes to the construction of successful pedagogical practices in Mathematics in High School. The relevance of this case study expresses the need to reinforce and diversify pedagogical practices of this school subject as an appreciation of planning as an instrument of reflection and action, to qualify the teaching work and, consequently, favor the learning of students in High School.

With regard to the methodological aspects, it adopts a qualitative approach of the case study type (Yin, 2005), and for the production of the data it uses the narrative interview with mathematics teachers and school managers (Director and Pedagogical Coordinator) (Jovchelovich; Bauer, 2002). Based on the methodology adopted, the results were systematized in order to constitute an empirical database, revealing pedagogical practices of two Mathematics teachers and information provided by the aforementioned managers. The data were produced and organized according to the objective of the study, in order to support the processes of analysis and interpretation of the research findings. based on the technique of Comprehensive-Interpretative Analysis, according to Souza (2014).

Through the presentation of these introductory elements, which underlie the proposed analysis, we deal with the relationship between pedagogical planning and the construction of successful pedagogical practices in the teaching of Mathematics, at the State Center of Full-Time (CETI) Augustinho Brandão, as the closing of this article, we present our conclusive considerations.

2 PEDAGOGICAL PLANNING: BASIS OF PEDAGOGICAL PRACTICE

We begin this theoretical reflection by expanding and reinforcing the notion of pedagogical practice, as Jesus (2021, p. 174) conceives it: "[...] it needs to promote the transformation and emancipation of the subjects involved. This transformation causes changes in the way educators and students teach and learn mediated by pedagogical practice".

When dealing with the relationship between pedagogical planning and the construction of successful pedagogical practices in the teaching of Mathematics, initially, we present the conception of successful pedagogical practice, discussing the theoretical foundations that define and characterize it as such, understood as a process of transformation and emancipation of the subjects resulting from intentional, reflective and ethical actions of the teacher.

The author in question points out that successful pedagogical practices are constituted in the teaching-learning process, promoting profound transformations, enhancing the emancipation of the subjects. Therefore, a successful pedagogical practice considers in

pedagogical planning the reality of both the school and the students, as well as the social and affective context in which the production and circulation of scientific knowledge takes place, ethically and politically committed to the common well-being. In these terms, it is desirable that it be intentionally conceived and structured, teleologically directed to a holistic education: to the human learning of students. For the development of pedagogical practices, in this scenario, it is essential to qualify teachers,

[...], from the perspective of a critical, reflective education, which provides the creation, planning and interpretation of the intentionalities of the curricula, of the social phenomena, the educational needs of the students, of the use of dialogue as a pedagogical principle to be able to develop differentiated, successful and meaningful practices (Anjos; Guedes, 2021, p. 30-31).

Based on this understanding, successful pedagogical practice is conceived as an action based on the construction and continuous reconstruction of knowledge, both by the teacher and the students, breaking with the idea of a transmissive view of teaching focused only on the educational needs of the students. In this case, in pedagogical planning, it requires the selection of various strategies and procedures to deal with the diversity that surrounds it, using differentiated resources, adaptive approaches, inclusive methodologies and, if necessary, differentiated activities, considering the students' learning levels, requiring teacher training "[...] emancipatory, in which teachers are understood as unfinished human beings, in movement and in constant evolution" (Bezerra, 2025, p. 27552).

Still, in relation to successful pedagogical practice, another pertinent aspect in Andrade's (2021) ideas is that it is related to the teacher's ability to be reflective and creative in their approaches, which by unveiling the strategies and procedures they use, not only makes their practice conscious and intentional, but also creates a learning environment that recognizes and values students' individual differences. This reality can increase the chances that all students, despite their diversity, will achieve the desired learning, even if in different ways and at different times.

Corroborating this understanding of successful pedagogical practice, the author goes further and suggests the teacher's willingness to create different teaching conditions continuously, in response to the needs of each student, with the objective of providing a truly inclusive development and learning. It is necessary to consider, therefore, the notes that successful practices collaborate in the search for solutions to the difficulties encountered, make use of strategies and significant experiences built by teachers in the school routine, catalysts for new directions and experiences in pedagogical action, both for the teacher and for the school.

Its relevance lies in its ability to promote dialogue, creating a collaborative environment that meets the pedagogical challenges arising from the local and educational reality. It emphasizes, therefore, the importance of transdisciplinary planning, which integrates various areas of knowledge and favors rich and connected learning, contributing to quality teaching. Thus, intentionally planned, successful pedagogical practice is presented as a determining factor for the progressive improvement of teaching, promoting meaningful and contextualized learning, stimulating the active and collaborative participation of students.

Next, we weave theoretical reflections on pedagogical planning in the teaching of Mathematics, highlighting its representativeness as a guiding instrument of teaching action, relating planning to successful pedagogical practices with emphasis on the articulation of theory and practice, reinforcing the need for a continuous process of adaptation and contextualization of pedagogical actions.

2.1 PEDAGOGICAL PLANNING AND PEDAGOGICAL PRACTICE IN MATHEMATICS TEACHING

When discussing pedagogical planning, we consider the importance of careful preparation according to the needs of the students, which allows for a successful pedagogical practice. In this sense, it is as Viana (2016, p. 85) states: "It is up to didactics to plan and organize the conditions for teaching. Thus, the pedagogical practice requires adequate planning to the intentionality of the student's future learning". According to the author, didactics is in charge of the guidelines related to the planning and organization of the necessary conditions for teaching, which includes intentional and constant preparation. In fact, it is as Andrade (2021, p. 17-18) points out,

We believe that even if the teacher contemplates in his planning the aspects that we consider to characterize a successful teaching practice, there will be no guarantee that all students develop in the same way, achieving learning. As efficient as teaching planning is, it does not reach all students at the same time. Therefore, the teacher has to resort to various strategies that aim to contemplate the diversity presented by the students. Unveiling the strategies and procedures used by teachers to achieve their intentions and pedagogical objectives are configured as our purpose.

These considerations raise a fundamental point about successful pedagogical practice: the idea that, while teaching planning is crucial, it does not guarantee that all students will achieve the same learning outcomes. This is due to the diversity intrinsic to students, whether in terms of learning styles, developmental paces, or social and cultural contexts. He adds that, no matter how meticulous the planning is, it needs to be flexible to meet the specific needs of each student. It cannot be seen as a fixed script, but as a basis

that can be adjusted according to the dynamics of the classroom, suggesting that it is not limited to the content or the way it is taught, but to the educator's ability to perceive and accept diversity.

Pedagogical planning reflects a commitment to the intentionality that the activities and resources used are aligned with the established educational objectives. It therefore requires a critical and reflective view of educational practices, incorporating adjustments and improvements based on the analysis of the results and the emerging needs of the students. As an instance that supports pedagogical practice, at the same time it enables an educational environment that promotes the integral development of students and responds to the dynamics/demands of the context in which it is carried out.

Among its multiple benefits, it collaborates with the autonomy and responsibility of the teacher in the educational process and with the need for a critical reading of reality, considering the limits of their individual and collective responsibility in contexts that are sometimes marked by structural precariousness, excess of classes, high workload and reduced institutional support, which causes work overload to the teacher who, strictly speaking, it is considered the main or only responsible for the success of planning, teaching and learning (concretely, this is not the reality of CETI Augustinho Brandão).

This comprehensive focus is particularly necessary for the pedagogical planning of Mathematics, since strategies and contents require adequate conditions for the development of students' potentialities and alignment with the school's objectives. The Mathematics teacher, when participating in collaborative planning, accesses different perspectives and experiences, strengthening the perception of inclusive, productive and successful teaching, compatible with the school reality and the demands of students. Thus, the way of approaching Mathematics content plays a fundamental role in teaching, in the development of cognitive skills necessary for the understanding of mathematical concepts, positively impacting their ability to solve problems and apply concepts.

An effective approach in this area involves the integration of pedagogical methods and strategies that go beyond the mere transmission of formulas and procedures, articulating with practices that encourage the active exploration of content, problem solving and research, aligning with the needs and interests of students, with regard to the promotion of activities that challenge them to think critically, developing a solid understanding of concepts, among other advantages of mathematics present both in school studies and in the different contexts of daily life.

When associated with the teaching of Mathematics, Viana (2016) stresses that pedagogical practice must go beyond the simple application of methods and techniques.

Instead, it is essential that planning is guided by clear and detailed objectives regarding the development of mathematical knowledge. According to this understanding, planning requires that we observe the needs and expectations of students in the structuring of activities, taking into account the context in which teaching is developed.

As mentioned by Viana (2016) , with regard to successful pedagogical practices, adequate planning not only organizes Mathematics content in a logical and accessible way, it also integrates it into strategies that meet the various forms of student learning. This means that pedagogical practice includes a variety of approaches and resources that, as suggested by D'Ambrósio (1993), allow a broader understanding of the problem-solving process, associated with the investigation and dynamic exploration of mathematical situations.

D'Ambrósio (1993) points out that pedagogical practice is characterized by its purposes and intentionalities expressed in the effective approaches to Mathematics contents, which is why planning needs to be aligned with the learning objectives and with the reality that characterizes the group of students. Intentionality in pedagogical practice implies that planning is not an isolated exercise, but a continuous and reflective activity that aims to guarantee students the necessary knowledge to achieve the proposed objectives and the development of solid mathematical skills.

Thus, the congruence of Viana's (2016) ideas and the approach to Mathematics contents pointed out by D'Ambrósio (1993) strengthen the understanding that a well-structured pedagogical planning is fundamental for a successful pedagogical practice. It is a planning that considers not only the contents to be taught, but also the ways in which these contents are presented and worked on in order to meet the needs and potentialities of students, with regard to the promotion of their learning.

By the way, these theorists, consensually, emphasize the role of the teacher in creating a favorable learning atmosphere that is indispensable to planning, which involves establishing an environment in which students feel motivated, safe to express their doubts and encouraged to face possible challenges, without fear of making mistakes. A careful and committed pedagogical practice focused on the teaching of Mathematics requires, therefore, combining pedagogical planning, active methodologies with a positive classroom climate, in which students can feel instigated to develop integrally.

The second component to be considered by the teacher in his planning, according to the authors in question, is the object of knowledge, that is, the educator, himself, needs to think critically, reflect and research on the content to be taught, seeking to update himself regarding the debate to be addressed, its advances, reformulations, among others, paying attention to the context in which the pedagogical action is substantiated, that is, the factual

situation in the classroom, the results of the evaluations, considering them from a formative perspective, in order to reflect on their practice, their adaptations and necessary flexibilities. This implies that the teacher, in these circumstances, is involved in a dialectical movement that includes the pedagogical plan in its initial abstract form and the materiality of the empirical situation in the classroom.

Guimarães and Santos (2017), in line with what the aforementioned theorize, with regard to the desirable characteristics of critical, reflective, globalized and humanized pedagogical practice, with orientation towards democratic formation. These qualities imply that successful pedagogical practice incorporates an approach that values critical analysis, constant reflection, and consideration of the global context of the human dimensions of education. We add that pedagogical practice needs to be contextualized, which means taking into account the specific environment in which it occurs, including local, social and cultural circumstances. It requires, therefore, that teaching is adjusted to the realities and needs of students, providing the evaluation process with important guiding elements.

Thus, it is not appropriate to disregard its historical component, recognize and integrate it into the temporal, political and evolutionary dimensions of education, paying attention to the influences and impacts of educational and social policies on the teaching-learning process. With regard to the cultural component, it provides the opportunity to reflect and respect the multiculturalism peculiar to the community and, consequently, to the students as well. In short, thinking and articulating the planning and pedagogical practice reflects and responds to the complexities of the educational context, in breadth and development that characterize the teaching of a subject, in this case, we speak of mathematics in high school.

3 PLANNING AND SUCCESSFUL PEDAGOGICAL PRACTICES IN THE TEACHING OF MATHEMATICS – CETI AUGUSTINHO BRANDÃO: NARRATIVES OF TEACHERS AND MANAGERS

The analysis of how planning contributes to the effectiveness of successful pedagogical practices in the teaching of Mathematics in the aforementioned State Center of Full-Time, covers elements that characterize the culture of planning in the school, favoring success in pedagogical practices, aspects confirmed in the narratives of teachers and managers of this institution. When undertaking the analytical process of the data, we start from the assumption that planning, in the context in question, goes beyond the merely technical or bureaucratic character. Its configuration expresses an intentional, critical and collaborative practice aimed at teaching quality mathematics, committed to learning and the integral development of its students.

When asked about the pedagogical practices developed and that lead to successful results in the study and learning of students, as stated in the fabric of their narratives, teachers and managers reveal the nature of their structuring, as observed in the data presented in the following Tables.

Figure 1

Narratives of teachers and managers about school planning

[...] Okay, a great advantage of the school is that, thank God, we have teachers trained in the area, all mathematics teachers are trained in mathematics, physics teachers are also teachers trained in physics, so pedagogical planning already has a great advantage in this sense. I believe that the training of the professional is the most relevant, in terms of pedagogical planning, there is a phrase of the great thinker, [...] the first thing you have to know is what you are going to teach and the second thing you have to know a little more than what you are going to teach. So, I think that great pedagogical planning starts with continuing education. [...] Sometimes we get together here at school, in a collective planning activity [...] pedagogical planning is more than knowing a content, it's knowing how to put yourself in the place of the student who is taking that class. When I go to teach, I always make the following reflection: would the class I am teaching here be the class I also wanted to attend? [...]. You have to know if your best class is that class that the student wants to attend. [...]. (Professor Gama – Narrative Interview, 2024).

The teachers who teach at this school, the majority, have been [...] Our motto here is to see the transformation of the place we live. As all teachers are from here, because those who did not found the school were students of the school. So, like this, planning is very free because it already has a consolidated work. So, you don't need the management, it's picking on anyone, because they are teachers that you have to put the red carpet for them to walk because they are so competent and so dedicated. [...] especially in the area of mathematics [...] I usually share things together with the coordinator who is full-time, so I leave this pedagogical part, this pedagogical autonomy to them [...], the meeting agenda, planning, the pedagogical part, is very linked to it. [...], my coordinator to give all the assistance in the planning, in the pedagogical guidelines. [...] I have full confidence in her. [...]. It is great knowledge and very didactic, very pedagogical, very explanatory. [...] so, it turns out that mathematics is an area of knowledge where students have no difficulty in ENEM (Alpha/Director – Narrative Interview, 2024).

The school's pedagogical planning is done at the beginning of the year, right, we analyze the data, see our results and in our first meeting it is a feedback and from there, our planning begins articulated with the teacher, who already plans and organizes everything he needs to do with the students during the school period. Everything in the school is designed to ensure learning, everything we do, both the management and the teacher, we have a very good dialogue. So, like this, we are always talking, sometimes even formally, not only in meetings. The planning, we meet, often bimonthly, to do it, but like this, our planning is daily, the teacher, we have a conversation, if the teacher needs it, has a need and says this week I need to work on a certain subject, I need certain material, it is possible. We look at this week, this month we are going to work, for example, in the third year, Enem questions from the year such-and-such, and then we already plan, we take it out for the students, we prepare the teacher, the teacher already does the correction and everything. So, like, everything that the teacher needs, everything that the teacher plans, that we understand is necessary, that is important, that will generate knowledge and generate knowledge, the school has support, so, we have thanks to God, our teachers, we have a very good dialogue, teachers committed and concerned with learning, So, always seeking to develop strategies for student performance to help them well in relation to these strategies you just talked about. (Beta/Pedagogical Coordinator - Narrative Interview, 2024).

Source: Data produced in the Narrative Interview with teachers and the management team (2023).

Professor Gama's narrative dialogues directly with the idea that the student should be the center of the educational process, requiring learning environments that favor investigation and application of knowledge, shifting the focus from the mere transmission of content to the

active construction of knowledge. In a complementary way, it highlights the importance of pedagogical planning that considers the interest and motivation of students, recognizing them as subjects with a "thirst for knowledge". This perspective reinforces the need for a reflective and intentional teaching practice, which breaks with routine activities, valuing student protagonism, locating the development of critical thinking and meaningful learning of students.

In his conception, he highlights that pedagogical planning requires more than mastering the content, as it involves the ability to understand and critically reflect on one's own practice. By stating that "pedagogical planning is more than knowing a content, it is putting oneself in the student's place", the teacher expresses a posture aligned with the vision of Vasconcellos (2002), whose understanding is that pedagogical practice emerges from the concrete reality of the subjects, the object of knowledge and the school context.

Professor Gama clarifies that there is a collective planning that takes place at the beginning of the year. This information is confirmed by teacher Somatório and Principal Alfa and, in her narrative, coordinator Beta attests to her existence in the school. Alfa, the school's manager, says that the collective planning of the team at CETI Augustinho Brandão has the purpose of developing the community. We understand from the narratives that refer to the Pedagogical Political Project (PPP) that, according to Veiga (2011), it is a theoretical-methodological instrument that the school elaborates, in a participatory way, with the purpose of pointing out the direction and the path it will take to carry out its educational function and, at its core, the pedagogical dimension of the teaching action.

Thus, the PPP presents the proposals for the fulfillment of the educational purposes of the educational establishment for the training of its students, contemplating the political dimension of education, in addition to the definition, for the scope of methods, resources and pedagogical strategies. In general, it is as Veiga (2011, p. 1) expresses

[...] The political-pedagogical project goes beyond a simple grouping of teaching plans and various activities. The project is not something that is built and then filed or forwarded to the educational authorities as proof of the fulfillment of bureaucratic tasks. It is built and experienced at all times, by all those involved with the school's educational process.

Veiga's (2011) analysis highlights the central importance of the Political-Pedagogical Project (PPP) as a living and collective instrument of school practice. By stating that the PPP "goes beyond a simple grouping of teaching plans and various activities", the author breaks with a technician or bureaucratic view of school planning, emphasizing that it should not be a static document, filed or prepared only to comply with legal requirements, but built and

experienced continuously, by all the subjects who participate in the educational process. with a political character (because it expresses conceptions of society, of human beings and of education) and a pedagogical character (because it guides teaching and learning practices). In it, the concept of evaluation is also present, revealing itself to be formative when Beta, pedagogical coordinator, emphasizes in the narrative presented in Figure 01, "Everything in school is designed to guarantee learning". Student learning is the center of all thoughtful actions, whether at the school level or in pedagogical planning.

As a subsidy to the teaching action, the pedagogical planning is present in the daily life of CETI Augustinho Brandão, presenting as a foundation the reality for the delineation of the teaching work routine. It is important to draw attention to what Professor Gama says, it is not enough just to know the content, but the student has to be the focal point of the teaching action. Therefore, the reflection carried out by the teacher about his class, at the time of planning, contributes to the class taught achieving the pedagogical objectives, according to the narratives in Figure 01.

As we have seen, Professor Gama associates pedagogical planning with continuing education. We understand that, when it makes this association, it imputes to continuing education the attribute of airing the practice, since it provides spaces for reflection on pedagogical action by analyzing the action developed and thinking about new strategies and forms of action, in addition to the need for continuing education of teachers, school planning, teacher-student and school-family relationship, among others.

The availability of *online* documents is also important to guide the daily action of teachers, by providing clear guidelines and practical resources for the development of teaching activities and strategies. This contributes to greater uniformity and consistency in pedagogical practice, ensuring that teachers align with the school's pedagogical proposal and students' learning expectations.

Alfa goes on to say that, after this moment of individual production of the specific pedagogical planning of each area of knowledge, the Pedagogical Coordination has a time with the teachers of each area to talk. The intervention of the principal occurs when some action escapes the purposes of the school, that is, the political base on which the pedagogical action is based. Thus, the daily planning, called "pedagogical routine", according to the narrative of the coordinator Beta, results from the bimonthly pedagogical planning.

Pedagogical planning, designed within the school as a support for successful practices, involves several steps: definition of objectives, selection of content, development of teaching strategies, evaluation of student learning and continuous review of the plan. As for the participants in this planning, teachers are usually the main responsible, since they are

executors who think and outline the proposal to be implemented, develop the lesson plan, based on the learning objectives, the needs of the students and the available resources.

In view of the narratives of teachers and managers, the understanding emerges that pedagogical planning is carried out by teachers, with the support of the management team, which collaborates for the development of the projected actions, providing resources, guidance and material and logistical support. Another highlighted aspect, contributing to successful pedagogical practices, is that in school all teachers have a degree in the area of their training and, therefore, in the discipline they teach, referring to their own condition and that of the Somatorium Teacher, also a mathematics teacher, but we emphasize that it is not enough to know the contents, because pedagogical knowledge is essential to carry out this mediation.

Professor Gama's narrative emphasizes the value of the content to be taught: "you have to know what you are going to teach and the second thing you have to know is a little more than what you are going to teach", he points out that, "[...] more than knowing a content, it is knowing how to put yourself in the place of the student who is taking that class [...]" and that "[...] the student has to be remembered when you do the pedagogical planning", overcoming the perspective of simple transmission of content, to put the focus back on student learning. It proposes to make planning a moment of evaluation of its pedagogical practice based on various questions, transforming it into a formative moment.

It requires, as we see, a reflective and critical approach, which allows professionals to make decisions based on relevant and ethical information, in relation to educational objectives, contents and methods. This should be the path that the teacher takes to not only learn about teaching strategies, but to integrate them in a meaningful way into their practice, which involves understanding them in depth, adjusting them to their classroom reality, granting them a new purpose, articulating theory and practice. We reaffirm, in this way, that school planning is fundamental for the promotion of a transformative pedagogical practice.

But, in planning, to adjust the pedagogical practice to the reality of the classroom, directing them to the learning objective to be achieved, it is necessary to have access to information about the students' learning. In this aspect, evaluation comes into play, as an essential component of pedagogical practice, by assuming the formative intention. This happens, according to Hadji (2001, p.21), when evaluation provides information that collaborates with the regulation of learning, producing changes in the pedagogical practices of teachers, in order to promote a "[...] better articulation between the collection of information and the mediating action". In addition to the teacher, evaluation with formative intent situates the learner on his own learning process, in order to favor the reorientation around his activity.

From this perspective, Professor Gama's narrative reveals characteristics of evaluation with formative intention when he exposes the relationship between pedagogical planning and learning evaluation. Let's look at the following table.

Figure 2

Mathematics Teacher Narratives: learning planning/evaluation relationship

Learning assessments serve to show how much the student has really learned. Qualitative evaluations, specifically, guide, will always guide our pedagogical planning. [...] I have no way of knowing what my class will be like if I don't have a qualitative assessment, if a student took a test here, the student didn't learn certain content, I can't pass it on. [...] My pedagogical planning is based on qualitative evaluation, it is on the feedback I receive from the students' tests. [...] my practice is basically this, we have achieved, thank God, great results. (Professor Gama – Narrative Interview, 2023).

Source: Data produced in the Narrative Interview with teachers (2023).

We observed characteristics of a formative conception of learning assessment as the use of the results to guide the pedagogical planning, to determine the pace of the process, always striving to ensure that none of the students falls by the wayside in relation to learning. Therefore, the evaluation guides the pedagogical planning by the qualitative analysis of the results. For Hadji (2001, p. 21), "An evaluation that is not followed by a modification of the teacher's practices has little chance of being formative!".

In addition, Hadji (2001) says that it is unnecessary for the evaluation process to be attached to some methodological standard to be formative, that is, from this perspective, the fact of carrying out a qualitative analysis of the data does not prevent one from proceeding with a quantitative analysis of the results, presenting a grade, as the teacher does, because it is a requirement of the state education system, to which the school is linked. In fact, according to the author, what makes an evaluation formative is to be truly useful, pedagogically helping both the student to learn, and offering information to the teacher to guide the effectiveness of teaching.

For Hadji (2001), in order to be formative, evaluation must have some characteristics: it must be informative, which is the main one, in addition to being informative for students and teachers, the two main subjects, and allow the correction of the course of the process. In Professor Gama's narrative we verify that these characteristics are present, resulting in the effectiveness of the teaching and learning processes.

Still regarding the evaluation processes, we can also see that there is a reference from Alfa, regarding the performance of the Class Council as an evaluation instrument with formative intention that offers valuable subsidies for pedagogical intervention, in order to enable the consolidation of learning.

Figure 3

Narratives of the School Director about the Class Council

[...] In the class council, we discuss all the problems to see if this is having repercussions on learning or on non-intervention. The class council has a frequency every two months. [...]. We point out everything, I have a person who writes everything down, so-and-so arrived and the teacher speaks [...], I'm here writing and then what we're going to do [...]. Everyone reaches a consensus [...] and I schedule everything to do and give the demand to the teachers. [...] each one knows their students what is happening, how it was done, [...] it was discussed. So, after we do this whole process of diagnosing [...] that he has learning difficulties for several things [...]: tutoring, monitoring, there will be those cases that unfortunately we will not be able to. (Alfa (School Director) - Narrative Interview, 2024).

Source: Data produced in the Narrative Interview with managers (2023).

It is, therefore, the Class Council used as a space for the analysis of the problems faced by students, as well as for the proposition of pedagogical actions and interventions. This reflects a systematic approach to assessing and monitoring students' progress, identifying potential difficulties and seeking appropriate solutions. It also shows an understanding of the complexity of educational issues and the need for an integrated approach to provide support.

Corroborating this understanding, Dubiela and Ferreira (2012) understand the Class Council as a collegiate instance that brings together educational processes in which the student should be the central axis of the discussions, not being restricted only to the issues of grades and inappropriate behaviors, but to the needs of the subjects, for the reorganization of the pedagogical work, this instance being a strengthening of the formative conception of school evaluation.

Still on evaluation with formative intent and on the instrument of the Class Council, we have the narrative of Beta, the school's pedagogical coordinator, part of the management team, in Figure 04, below.

Figure 4

Beta's narrative about the school's evaluation processes

So our class councils, for example, we analyze student by student and in this analysis we realize look at these students, we see all the subjects, how it is, which subjects have the greatest difficulties. [...] We select the monitor that is easier and that can help colleagues [...]. [...] The class council as I said to you, we analyze the performance of all students, when we start our class council we spend a day at school doing this analysis and not only analyzing the student's report card, not only analyzing the performance, but analyzing the student as a whole [...]. (Beta/Pedagogical Coordinator - Narrative Interview, 2024).

Source: Data produced in the Narrative Interview with the Management Team (2024).

Beta's narrative reveals that the student's evaluation in the Class Council is carried out collectively, observing not only the internal factors that interfere with learning, but also the external ones, an analysis in an integral way. It fulfills its function in relation to the guarantee of learning, seeking collective solutions, since from the analysis of the student as a whole, it seeks appropriate strategies, such as extending the time to approach certain content, as well as offering support or monitoring material, among many other possible ones, corroborating the ideas of Dubiela and Ferreira (2012, p. 7) that this school body "has the responsibility of formulating proposals regarding educational action".

4 CONCLUSION

By presenting these considerations about the analysis carried out, we recognize planning as an intentional and reflective act, which transcends the mere organization of contents and procedures, configuring itself as an ethical, political and creative instrument for the construction of emancipatory and contextually significant learning.

The evaluation of learning also stood out as an essential component, assuming an eminently formative perspective, in which the main purpose is the diagnosis of difficulties, in order to support pedagogical planning. The Class Council is one of the instruments used for analysis and collective decision-making to promote learning, showing that the focus is on ensuring that everyone learns.

At the end of this article, we reinforce that pedagogical planning is an essential element for a successful pedagogical practice, as a moment of reflection carried out by teachers with the support of the management team, involving the school collective, always with the purpose of promoting learning.

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